studies; (d) analysing data and (e) presenting the results. A comprehensive English-language literature search of the electronic databases PubMed and Science Direct was undertaken to identify published papers. Data were collected and analysed until May 2021.

Results In this review, we incorporated one retrospective and one prospective cohort study. In the ongoing prospective Long-Term Follow-Up (LTFU) study (13 patients), 100% of SMA I infants in the therapeutic-dose cohort were alive and free of permanent ventilation. It was reported that 20% of SMA I infants achieved the additional milestone of standing with assistance. The LTFU study has demonstrated that SMA I infants improved their Children's Hospital of Philadelphia Infant Test of Neuromuscular Disorders (CHOP-INTEND) scores (≥4 points). In the retrospective cohort study of SMA I (3 patients) and SMA II infants (4 patients), it was perceived that 43% of SMA patients had meaningful increases in the CHOP-INTEND score and 57% had increases in the Hammersmith Functional Motor Scale-Expanded (HFMSE) score.

Conclusion and relevance Despite the limited observation period, we conclude that Zolgensma is effective since no clinical regression or waning of effect had been reported. Nonetheless, several factors might still influence the duration of Zolgensma's effectiveness. As such, further research is needed to evaluate the persistence of the Zolgensma real-world effect in SMA infants.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

6ER-008 DEVELOPMENT OF A RISK-SHARING MODEL BASED ON THE CLINICAL PERFORMANCE OF ONASEMNOGENE ABEPARVOVEC (ZOLGENSMA)

[1]AC Martins De Figueiredo*, [2]RP Pinheiro Gonçalves Marques, [1] AP Mecheiro De Almeida Martins Silvestre Correia, [2]AF Cosme Silva. *[1]Faculdade de Farmácia da Universidade de Lisboa, Lisbon, Portugal; [2]Centro Hospitalar Universitário de Lisboa Norte – Hospital de Santa Maria, Lisbon, Portugal*

10.1136/ejhpharm-2022-eahp.358

Background and importance Zolgensma is an innovative gene therapy for spinal muscular atrophy (SMA) infants. Nevertheless, the life-long clinical follow-up needed for understanding the long-term effectiveness of Zolgensma in combination with an exceptionally large single payment represents scientific and financial challenges for the pharmaceutical industry, regulators and payers. The so-called Performance-Based Risk-Sharing Arrangements-Performance Linked Reimbursement (PBRSAs-PLR) are financial models that have been developed for reducing uncertainty through greater investment in evidence collection, while a technology is used within a healthcare system.

Aim and objectives The scope of this investigation comprised the development of a hypothetical PBRSA-PLR for Zolgensma Gene Replacement Therapy (GRT).

Material and methods A review of the literature was constructed, comprising five phases: (a) identifying the research question; (b) searching for relevant studies; (c) selecting studies; (d) analysing data and (e) presenting the results. A comprehensive English-language literature search of the electronic databases PubMed and Science Direct was undertaken to identify published papers. Data were collected and analysed until May 2021.

Results We propose an outcome-based scheme based on Zolgensma performance in terms of sustainability of the clinical effect. The relevant outcomes should be the subsequent for a given SMA infant: (a) overall survival and (b) event-free survival. We further suggest an annuity-based payment scheme to reduce the consequences of the annual budget impact with a pay-over-time of 5 to 15 years to increase patient access. More favourable outcomes could be achieved if SMA infants started treatment earlier. Thus, we propose a maximum 50% refund for Zolgensma early dosing in SMA infants (until 3 months old), and a maximum 25% refund for Zolgensma late dosing in SMA patients (after 3 months until 9 months old), if Zolgensma fails to meet the agreed-upon outcomes and predefined timing of outcome assessments.

Conclusion and relevance We conclude that it would be possible to mitigate uncertainty around the incremental budgetary impact and cost-effectiveness of Zolgensma GRT. Nonetheless, it should be outlined that innovative payment schemes should only be applied in circumstances where there is scope for such mechanisms to effectively reduce decision uncertainty so that the probability of long-term cost-effectiveness can be improved.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

6ER-011 COTRIMOXAZOLE: HOW FOLATE SUPPLEMENTATION COULD AFFECT TREATMENT EFFICACY

JM Del Río Gutiérrez*, P Sanchez Sancho, HC Garcia Diaz, A Pau Parra, C Varon Galcera, D Anguita Domingo, MB Guembe Zabaleta, GA Javier, P Gonzalez Moreno, JC Juarez Gimenez. *Vall d'Hebron Hospital, Pharmacy, Barcelona, Spain*

10.1136/ejhpharm-2022-eahp.359

Background and importance Cotrimoxazole (CTX) is an association of sulfamethoxazole and trimethoprim which acts synergistically to inhibit folic acid synthesis and block bacterial growth. It is used in the treatment of bacterial infections and in the prophylaxis of opportunistic diseases like toxoplasmosis and infection with *Pneumocystis jirovecii* in immunosuppressed patients. CTX causes myelotoxicity since it affects the same process in human cells. To prevent toxicity, folic or folinic acid can be administered. However, there is controversy as to whether this folate supplementation could affect the efficacy of cotrimoxazole.

Aim and objectives To determine if the co-administration of CTX and folates compromises efficacy of the treatment.

Material and methods A review of the published evidence on CTX and folate supplementation was conducted. An initial search was performed in PubMed and Google Scholar using the terms 'cotrimoxazole' and 'folates' and 'efficacy' supported by federal data sheets.

Results Regarding the use of folates as a supplement in bacterial infections, there is no evidence at all. Theoretically, as these bacteria intrinsically lack mechanisms to capture exogenous folates, it seems to be more appropriate to use folic acid before folinic acid due to its lipophilicity avoiding a possible passage of this molecule through the bacterial wall, which is lipophilic in nature. *P. jirovecii* is permeable to lipophilic folates and lacks an active transport mechanism to incorporate classical folates. Therefore, the administration of folinic acid, which is more lipophilic, could reduce the antifolate activity of CTX meanwhile folic acid supplements do

not affect the activity of CTX. In the case of *Toxoplasma gondii*, the folate of choice is folinic acid because the microorganism can intake exogenous folate through the BT1 family transmembrane proteins which also have no affinity for folic acid.

Conclusion and relevance In general, theoretically folic acid supplementation can be used to prevent myelotoxicity as it does not interfere with the action of the antibiotic in the case of bacteria. However, in infections caused by more complex eukaryotic organisms such as other fungi or parasites with lipophilic cell walls or specifical transmembrane proteins, each case must be evaluated on its own merits.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

6ER-012 EFFECTIVENESS OF IL-23 INHIBITORS IN PATIENTS WITH MODERATE–SEVERE CHRONIC PLAQUE PSORIASIS

A Peláez Bejarano, O Montero Perez, I García Giménez*. *Hospital Universitario Juan Ramón Jiménez, Farmacia Hospitalaria, Huelva, Spain*

10.1136/ejhpharm-2022-eahp.360

Background and importance Inhibitors of interleukin-23 (IL-23 inhibitors) have emerged as safe and effective options for the treatment of moderate-to-severe plaque psoriasis. These drugs are contributing to a rising standard for psoriasis outcomes through resolution of skin lesions and joint manifestations and improvement of patient quality of life

Aim and objectives To evaluate the effectiveness of IL-23 inhibitors in patients with moderate–severe chronic plaque psoriasis

Material and methods This was an observational study including patients with moderate-to-severe psoriasis who were treated for at least 36 weeks with IL-23 inhibitors. Data collected, obtained from digital clinical history, were: demographic characteristics and previous biological therapies. The severity of plaque psoriasis was assessed by the Psoriasis Area Severity (PASI). Efficacy was evaluated by estimating the proportion of patients achieving PASI 75, PASI 90 and PASI 100 responses at weeks 16, 24 and 36. Student's t-test for paired samples was used to determine the significant difference in outcome of patients between PASI at baseline and PASI response at weeks 16, 24 and 36. Data were analysed using IBM SPSS Statistics v.19.0

Results A total of 35 patients were included, 21 women (60%), mean age 50.6±13.8 years. IL-23 inhibitors used were: guselkumab (n=26, 74%) and risankizumab (n=9, 26%). All patients had chronic plaque psoriasis. Most of them had previously been treated with a biologic agent (n=33, 94%). 5 patients (14%) discontinued the anti-IL23 therapy due to inefficiency. Mean PASI at baseline was 10.1±5. IL-23 inhibitors decreased mean PASI from baseline to 3±3.3 (p=0.003), 2±3 8 (p=0.001), 1.3±2.9 (p=0.001) at 16, 24 and 36 weeks, respectively. At 16 weeks, PASI 75, 90 and 100 response was achieved in 50%, 31.8% and 22.7% of patients; at 24 weeks, PASI 75, 90 and 100 response was achieved in 86.4%, 54.5% and 40.9%, whereas at 36 weeks, PASI 75, 90 and 100 response was achieved in 100%, 77.3% and 72.7% of patients, respectively.

Conclusion and relevance IL-23 inhibitors show great results in the management of moderate-to-severe psoriasis in adults. Results of this real-life study are consistent with the pivotal trials.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

6ER-014 ANALYSIS OF THE EVOLUTION OF INTERLEUKIN-6 IN COVID-19 PATIENTS AFTER BEING TREATED WITH DEXAMETHASONE

[1]AB Pousada Fonseca*, [1]I Morona Mínguez, [1]N Garrido Peño, [1]I Soto Baselga, [1]J Solís Olivares, [1]B Rubio Cebrián, [1]Y Mateos Mateos, [1]I Sollano Sancho, [2]B Bertrán De Lis Bartolomé, [3]N Seco Moro, [1]C Moriel Sanchez. *[1]Hospital Universitario de Móstoles, Hospital Pharmacy, Móstoles, Spain; [2]Hospital Universitario Fundación Jimenez Díaz, Hospital Pharmacy, Madrid, Spain; [3]Hospital Universitario de Móstoles, Clinical Analysis, Móstoles, Spain*

10.1136/ejhpharm-2022-eahp.361

Background and importance Levels of interleukin-6 (IL-6) in patients with coronavirus disease 2019 (COVID-19) are particularly relevant before treatment with tocilizumab. According to the protocol established in our centre, levels of IL-6 above 40 pg/mL are required to start treatment with tocilizumab. Assessing the role of dexamethasone in the evolution of IL-6 during the first hours of the patient's hospital admission could help prevent premature use of tocilizumab.

Aim and objectives Assessing the evolution of IL-6 after the use of dexamethasone in patients diagnosed with COVID-19 and IL-6 >40 pg/mL.

Material and methods Descriptive, retrospective, observational study carried out between November 2020 and January 2021 in a second-level hospital. All patients with determinations of IL-6 were located. Those with IL-6 levels above 40 pg/mL were selected. Through a review of medical histories, COVID-19 patients who were treated with dexamethasone and with determination of IL-6 levels, both at the admission and within the following 96 hours, were chosen. Exclusion criteria: prescription of dexamethasone at least 24 hours before the first determination and use of tocilizumab before the first determination or between determinations. Data were subjected to Wilcoxon's test.

Results 41 patients met the criteria. 28 of them were men (66.7%) with a median age of 64 years (IQR 23). The median time between determinations was 48 hours (IQR 48). The median level of IL-6 at the time of the hospital admission was 85.6 pg/mL (IQR 110.9) and after being treated with dexamethasone it was 24.2 pg/mL (IQR 33.1). The median of differences was –66.1 pg/mL (IQR 67.3) and 87.8% of the patients experienced a decrease, observing a statistical association (p<0.01). 75.6% of the patients showed levels below 40 pg/mL and 21.9% showed levels within the reference range (<7 pg/mL). 12 patients (29.3%) were finally treated with tocilizumab, of which 7 (58.3%) still presented levels of IL-6 >40 pg/mL.

Conclusion and relevance Dexamethasone treatment reduced IL-6 levels to below 40 pg/mL in most patients in 48 hours.

IL-6 monitoring after dexamethasone treatment could help prevent inadequate use of tocilizumab.

It is necessary to research the benefits of tocilizumab for patients with low levels of IL-6.